4144

BILL NO. S-78-08-28

SPECIAL ORDINANCE NO. S-147-78

AN ORDINANCE approving Change Order No. 21, in connection with the Water Quality Control Project - Division I of Water Pollution Control Plant Addition.

BE IT ORDAINED BY THE COMMON COUNCIL OF THE CITY OF FORT WAYNE, INDIANA:

SECTION 1. That Change Order No. 21 to Hagerman-Shambaugh, joint bidders, in connection with the Water Quality Control Project - Division I of Water Pollution Control Plant Addition, for:

> modification of Motor Control Center to conform with electrical requirements, provide emergency lighting source in stairways in aeration tunnel, additional emergency power source, relocation of Gas Compressor, deletion of Remote Stop/Start pushbuttons on Shredder to prevent injury, alter Sluice Gate to conform with requirements, change electrical conductors to cope with electrical load requirement, install new Motor Control Center Cubicle to receive new Style Starters for necessary electrical components and installation of new larger size circuit breaker for new Compressor being furnished,

in the amount of $83,471.27, as set out in the specifications, is hereby in all things ratified, confirmed and approved.

SECTION 2. That this Ordinance shall be in full force and effect from and after its passage and approval by the Mayor.

Councilman

APPROVED AS TO FORM AND LEGALITY,

CITY ATTORNEY

Read the first time in full and on motion by Burns, seconded by Hunter, and ~~duly adopted, read the second time by~~ title and referred to the Committee on _____ (and the ~~City Plan~~ Commission for recommendation) ~~and~~ Public Hearing to be held after ~~due legal notice~~, at the Council Chambers, ~~City-County Building~~, Fort Wayne, Indiana, on _____, the _____ day of _____, 19__, at _____ o'clock ____ M., E.S.T.

DATE: 8-8-78

Charles W. Westermann
CITY CLERK

Read the third time in full and on motion by Burns, seconded by Hinga, and duly adopted, placed on its passage.

PASSED (~~LOST~~) by the following vote:

	AYES	NAYS	ABSTAINED	ABSENT	TO-WIT:
TOTAL VOTES	7	0		2	
BURNS	X				
HINGA	X				
HUNTER	X				
MOSES	X				
NUCKOLS				X	
SCHMIDT, D.	X				
SCHMIDT, V.	X				
STIER				X	
TALARICO	X				

DATE: 8-22-78

Charles W. Westermann
CITY CLERK

Passed and adopted by the Common Council of the City of Fort Wayne, Indiana, as ~~(ZONING MAP)~~ ~~(GENERAL)~~ ~~(ANNEXATION)~~ (SPECIAL) ~~(APPROPRIATION)~~ ORDINANCE (~~RESOLUTION~~) No. S-147-78 on the 22nd day of August, 19 78.

ATTEST: (SEAL)

Charles W. Westermann
CITY CLERK

Samuel J. Talarico
PRESIDING OFFICER

Presented by me to the Mayor of the City of Fort Wayne, Indiana, on the 23rd day of August, 19 78, at the hour of 11:40 o'clock A M., E.S.T.

Charles W. Westermann
CITY CLERK

Approved and signed by me this 24th day of August, 1978, at the hour of eleven o'clock _____ M., E.S.T.

Robert E. Armstrong
MAYOR

Held 8/15/78
Get someone down to Council who can discuss this ordinance.

Bill No. S-78-08-28

REPORT OF THE COMMITTEE ON CITY UTILITIES

We, your Committee on City Utilities to whom was referred an Ordinance approving Change Order No. 21, in connection with the Water Quality Control Project - Division I of Water Pollution control Plant Addition

have had said Ordinance under consideration and beg leave to report back to the Common Council that said Ordinance do PASS.

PAUL M. BURNS - CHAIRMAN

JAMES S. STIER - VICE CHAIRMAN

VIVIAN G. SCHMIDT

WINFIELD C. MOSES, JR.

FREDRICK R. HUNTER

8-22-78 CONCURRED IN
DATE CHARLES W. WESTERMAN, CITY CLERK

Memorandum

To Howard Biggs Date 7-20-78

From Neil Wisler

Subject WPC Plant Expansion - Division I

COPIES TO:

Paul Brunner
Ed Stanczak
Ron Pitzer
Ray Kocher

Attached is change order #21, with drawings, which is a change order for changes to several motor control centers.

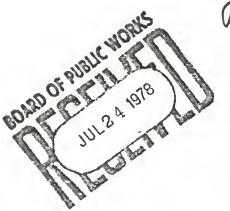
We have reviewed this change order and we recommend its approval.

We are submitting for your approval prior to transmitting to the Board of Works.

Neil Wisler
Neil Wisler
Program Manager
WPC Plant

dwgs in vault per um - af 7/24/78

BOARD OF PUBLIC WORKS
RECEIVED
JUL 24 1978



66-99-12
7/24/78

HNTB

HOWARD NEEDLES TAMMEN & BERGENDOFF

3333 Founders Lane, Indianapolis, Indiana 46268 (317) 299-3160

LETTER OF TRANSMITTAL

Job No 3263-43-00 1A

Date July 18, 1978

TO Board of Public Works
City of Fort Wayne
City-County Building
One Main Street
Fort Wayne, Indiana 46802

RE Water Quality Control Project
Division I
Ft. Wayne, Indiana

WE ARE FORWARDING TO YOU:

- ☐ Estimates
- ☐ Plans
- ☐ Shop Drawings
- ☐ Copy of letter
- ☐ Proposals
- ☐ Prints
- ☐ Samples
- ☒ Change order
- ☐ Reports
- ☐ Under separate cover via: _____
- ☐ Specifications
- ☐ _____

NO. OF COPIES	DRAWING NO.	LAST DATED	CODE	DESCRIPTION
8				Change Order No. 21

THESE ARE TRANSMITTED

- ☒ For approval
- ☐ For your use
- ☐ As requested
- ☐ For review and comment
- ☐ Resubmit _____ Copies for review
- ☐ Submit _____ copies for distribution
- ☐ Return _____ corrected prints
- ☐ _____
- ☐ No exceptions taken (NE)
- ☐ Make corrections noted (MCN)
- ☐ Amend and resubmit. (AR)

PLEASE NOTE: Please return all but one copy.

CC. _____

sf

HOWARD NEEDLES TAMMEN & BERGENDOFF

Per Ray H. Kocher

Ray H. Kocher, P.E.

ME112-0776-3M(R)

Job No. 3263.8D

PROJECT WATER QUALITY CONTROL PROJECT OWNER CITY OF FORT WAYNE, INDIANA

DIVISION/SECTION I - Water Pollution Control Plant Additions

CHANGE ORDER NO. 21

TO: Hagerman-Shambaugh - Joint Bidders
c/o Hagerman Construction Corporation
403 Strauss Building
P. O. Box 690
Fort Wayne, Indiana 46801

You are hereby authorized to make the following additions and/or deductions to your contract amount.

	Previous Contract Amount	Increase	Decrease	Net Change (Deduct) (Add)	Revised Contract Amount
TOTAL	$21,874,311.62	$ 84,240.13	$ 768.86	$ 83,471.27	$ 21,957,782.89

Description of Change:

	Add	Deduct
MOTOR CONTROL CENTER CHANGES		
Item No. 1		
Delete from MCC-A thirteen (13) FVR starters and one (1) 30 C.B. panel.		
Add to MCC-A four (4) FVNR size 1 starters, two (2) 20A/3P and one (1) 70A/2P circuit breakers, one (1) 25 KVA, 480/240/120 volt, single phase transformer, one (1) 24 C.B. and one (1) 36 C.B. panels. Following is a breakdown of the costs:		
Material	$ 1,020.69	
Labor	318.49	
Sub-Contractors Overhead & Profit	267.84	
Item No. 2		
Add wall mounted battery light units at each of the two (2) new stairway landings at each end of the new aeration tunnel. Following is a breakdown of the costs:		
Material	685.30	
Labor	504.66	
Sub-Contractors Overhead & Profit	237.99	

PROJECT WATER QUALITY CONTROL PROJECT Job No. 3263.8D

CHANGE ORDER NO. 21

Description of Change:	Add	Deduct

Item No. 3

Delete from MCC-P4 twenty-two (22) FVR size 1 starters, two (2) lighting contactors, one (1) 20A/3P and two (2) 38A/3P circuit breakers, one (1) 37-1/2 KVA, 480/240/120 volt, single phase transformer and associated 100A/2P circuit breaker, one (1) 200A/3P circuit breaker, and one (1) section cubicle.

Add to MCC-P4 two (2) FVNR size 1 starters, four (4) 15A/3P and two (2) 225A/3P circuit breakers, one (1) 42 C.B. panel, and one (1) 25 KVA, 480/240/120 volt, single phase transformer. Following is a breakdown of the costs:

Material	$ 2,276.06
Labor	3,654.78
Sub-Contractors Overhead & Profit	1,186.17

Item No. 4

Delete from MCC-P1 seven (7) FVNR size 1 starters, three (3) FVNR size 2 starters, fifteen (15) FVR size 1 starters, three (3) lighting contactors, one (1) 800A/3P circuit breaker, one (1) 400A/3P circuit breaker, two 225A/3P circuit breakers, one (1) 200A/2P circuit breaker, one (1) 100A/2P circuit breaker, twenty-eight (28) 100A/3P frame circuit breakers, twenty-four (24) 100A/2P frame circuit breakers, one (1) AC/DC automatic transfer switch, three (3) section cubicles, and one (1) 100 KVA, 480 volt, 3 phase to 240/120 volt, single phase transformer.

Add five (5) FVNR/2S-1W size 1 starters, two (2) FVNR size 3 starters, one (1) 30 amp lighting contactor, one (1) 13 C.B. power panel, one (1) 36 C.B. lighting panel, one (1) 300A/3P circuit breaker, one (1) 125A/2P circuit breaker, one (1) 100A/3P circuit breaker, one (1) 70A/3P circuit breaker, and three (3) 25 KVA, 480/240/120 volt, single phase transformers. Following is a breakdown of the costs:

Material	767.61
Labor	2,041.05
Sub-Contractors Overhead & Profit	561.73

PROJECT WATER QUALITY CONTROL PROJECT Job No. 3263.8D

CHANGE ORDER NO. 21

PAGE -3-

Description of Change:	Add	Deduct
Item No. 5		
Add MCC-P1-1 complete with four (4) 5 KVA control transformers, five (5) FVR size 1 starters, four (4) FVNR/2S-1W starters, three (3) FVNR size 1 starters, eight (8) 100A/3P frame circuit breakers, one (1) 225A/3P circuit breaker one (1) 70A/2P circuit breaker, six (6) contactors, one (1) 25 KVA, 480/240/120 volt, single phase transformer, one (1) 36 C.B. panel, nine (9) section cubicles, concrete base and main 480 volt, 3 phase feeder from MCC-P1. Following is a breakdown of the costs:		
Material	$ 5,270.22	
Labor	8,437.60	
Sub-Contractors Overhead & Profit	2,741.56	
Item No. 6		
Change four (4) Type MB fixtures to Wide Lite Co. Cat. No. SSB-1001DWRB-D-20-LQH type fixture and wire the 150 watt quartz lamps to the AC/DC panel for emergency lights in new blower room.		
Material	670.67	
Labor	2,162.94	
Sub-Contractors Overhead & Profit	425.04	
Item No. 7		
Furnish and install a complete D.C. Distribution Panel separate from MCC-P1 which shall include one (1) automatic transfer switch, one (1) 12 C.B. panel, two (2) 50A/2P circuit breakers, one (1) contactor, one (1) constant voltage rectifier, one (1) combination fuse/circuit breaker rated at 200 amperes, and one (1) free standing NEMA 1 type enclosure complete with all required wiring. Following is a breakdown of the costs:		
Material	10,446.88	
Labor	6,318.98	
Sub-Contractors Overhead & Profit	2,514.88	

PROJECT WATER QUALITY CONTROL PROJECT Job No. 3263.8D

CHANGE ORDER NO. 21

Description of Change:	Add	Deduct
Item No. 8		
Reduce the length of branch motor feeders to the two (2) existing compressors by connecting the circuit wires to starters located at MCC-C instead of MCC-P1 as shown on Drawing E-13. Following is a breakdown of the costs:		
Material	$ 182.29	
Labor	818.25	
Sub-Contractors Overhead & Profit	200.11	
Subtotal		
Item No. 9		
Provide branch motor feeders to the existing gas booster pump located near the new jacket water pumps. Following is a breakdown of the costs:		
Material	242.12	
Labor	1,400.12	
Sub-Contractors Overhead & Profit	328.45	
Subtotal		
Item No. 10		
Delete from MCC-P2 two (2) FVNR size 1 starters, two (2) 70A/3P and one (1) 200A/3P circuit breakers, one (1) 42 C.B. panel and one (1) section cubicle. Add to MCC-P2 one (1) 50A/3P, one (1) 70A/2P, and one (1) 225A/3P circuit breakers, and one (1) 36 C.B. panel. Following is a breakdown of the costs:		
Material	2,314.23	
Labor	5,607.20	
Sub-Contractors Overhead & Profit	1,584.29	

PROJECT WATER QUALITY CONTROL PROJECT Job No. 3263.8D

CHANGE ORDER NO. 21

Description of Change:	Add	Deduct
Item No. 11		
Delete stop-start pushbuttons at motor control center and associated wiring for the remote control of the two (2) new shredders located in the grit chamber. Following is a breakdown of the costs:		
Material		$ 175.52
Labor		123.85
Sub-Contractors Overhead & Profit		59.87
Item No. 12		
Reduce the voltage and ampacity requirements for the feeders to the motorized operators serving the two new sluice gates. Following is a breakdown of the costs:		
Material		0
Labor		341.35
Sub-Contractors Overhead & Profit		68.27
Item No. 13		
Delete from MCC-C nine (9) FVNR size 1 starters, one (1) 20 C.B. panel, one (1) 10 KVA, 480/240/120 volt transformer, one (1) 200A/3P main circuit breaker and two (2) 20A/3P circuit breakers. Add to MCC-C three (3) FVR size 2 starters, one (1) 5 KVA, 480/240/120 volt transformer, one (1) 6 C.B. pane, and one (1) 100A/3P circuit breaker. Following is a breakdown of the costs:		
Material	$ 1,337.17	
Labor	935.69	
Sub-Contractors Overhead & Profit	454.57	

Description of Change:	Add	Deduct
Item No. 14		
Provide and install a new feeder from MCC-C to the existing 10 HP compressor/condenser unit and make final connections. Following is a breakdown of the costs:		
Material	$ 167.04	
Labor	1,637.63	
Sub-Contractors Overhead & Profit	360.93	
Item No. 15		
Delete one (1) 480 volt, 3 phase C.B. panel, one (1) 120 volt C.B. panel, and fourteen (14) terminations at the Chemical Unloading Station plus 2,450 feet of #6 THW wire from MCC-C to Chemical Unloading Station plus , add 700 feet of #6 THW wire from MCC-C to Station and add inside Station one (1) 20A/2P circuit breaker, one (1) 30 ampere, 2 pole, NEMA 1 disconnect switch, one (1) 4 C.B. lighting panel, and four (4) terminations. Following is a breakdown of the costs:		
Material	319.81	
Labor	821.67	
Sub-Contractors Overhead & Profit	228.29	
Item No. 16		
Delete from MCC-P3-A six (6) FVNR size 1 starters, one (1) FVR size 1 starter, one (1) 50A/2P and one (1) 30A/3P circuit breaker. Add to MCC-P3-A one (1) 36 C.B. panel, one (1) 15 KVA, 480/240/120 volt, single phase transformer, one (1) 40A/2P circuit breaker and one (1) 70A/2P circuit breaker. Following is a breakdown of the costs:		
Material	625.64	
Labor	164.63	
Sub-Contractors Overhead & Profit	158.05	

PROJECT WATER QUALITY CONTROL PROJECT Job No. 3263.8D

CHANGE ORDER NO. 21

Description of Change:	Add	Deduct
Item No. 17		
Delete from MCC-B four (4) FVNR size 1 starters, three (3) 15A/3P circuit breakers, one (1) 50A/3P circuit breaker, one (1) 20A/2P circuit breaker, one (1) 30 C.B. panel, one (1) 10 KVA, 480/240/120 volt, single phase transformer, and one (1) section cubicle. Add two (2) FVR size 1 starters, one (1) 6 C.B. panel, one (1) 37-1/2 KVA, 480/240/120 volt transformer, and one (1) 70A/3P circuit breaker. Following is a breakdown of the costs:		
Material	$ 1,243.74	
Labor	319.05	
Sub-Contractors Overhead & Profit	312.56	
Item No. 18		
Change the 480 volt, 3 phase circuit wiring to 120 volt, single phase circuit wiring and mount the existing controllers for the two (2) existing chemical feed pumps being reused at the new Chemical Feed Building. Following is a breakdown of the costs:		
Material	54.22	
Labor	468.60	
Sub-Contractors Overhead & Profit	104.56	
Item No. 19		
Delete from MCC-D two (2) 73-1/2" high by 20" wide section cubicles, one (1) 20A/2P, three (3) 20A/3P, one (1) 40A/3P and one (1) 50A/3P circuit breakers and three (3) FVNR size 1 starters. Add one (1) section cubicle to form MCC-D with one (1) 40A/3P, one (1) 30A/2P, one (1) 70A/3P and one (1) 100A/3P circuit breakers, one (1) 12 C.B. panel and one (1) 10 KVA, 480/240/120 volt, single phase transformer. Following is a breakdown of the costs:		
Material	809.56	
Labor	1,802.26	
Sub-Contractors Overhead & Profit	522.36	

PROJECT WATER QUALITY CONTROL PROJECT Job. No. 3263.8D

CHANGE ORDER NO. 21

Description of Change:	Add	Deduct
Item No. 20		
Install new 50 ampere, 3 pole circuit breaker for circuit protection to new air compressor. Following is a breakdown of the costs:		
Material	$ 0	
Labor	17.37	
Sub-Contractors Overhead & Labor	3.47	
TOTAL ALL ITEMS	$78,057.07	$768.86
TOTAL NET CHANGE (ADD)	$77,288.21	
Contractor Overhead & Profit	6,183.06	
TOTAL NET CHANGE	$83,471.27	

PROJECT WATER QUALITY CONTROL PROJECT Job. No. 3263.80

CHANGE ORDER NO. 21

PAGE 9

Description of Change: Add Deduct

The time necessary for the execution of changes required in this change order is 20 calendar days. However, this work shall be accomplished concurrently with the time allowed or provided for under Change Order No. 18; therefore, no job management costs of the electrical subcontractor are included in this change order.

It is also recognized that this change order does not include any changes to the process control and computer system, and no costs associated with the process control and computer system or costs flowing from these items have been included.

RECOMMENDED:

HOWARD NEEDLES TAMMEN & BERGNEDOFF
HENRY B. STEEG & ASSOCIATES DIVISION

By Roy N. Kaher
Project
Title Engineer Date 7/18/78

ACCEPTED:

HAGERMAN-SHAMBAUGH, Joint Bidders
ACCEPTED FOR HAGERMAN CONSTRUCTION CORP.
CONTRACTOR

By Walt F. Hagerman
Title Vice-Pres. Date 6/30/78

ACCEPTED FOR SHAMBAUGH & SON, INC.
CONTRACTOR

By
Title Secy Date 7/5/78

APPROVED:

CITY OF FORT WAYNE, INDIANA
OWNER

By Henry P. Wehrenberg
Henry P. Wehrenberg, Chairman

Ethel H. LaMar
Ethel H. LaMar, Member

Max G. Scott
Max Scott, Member

Title BOARD OF PUBLIC WORKS

Date 7/24/78

Item No. 1

Change Order No. 21

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The motor control center MCC-A is being modified in such a manner that the starters, transformers, circuit breakers and other electrical components conform with the actual electrical requirements of the new equipment furnished and installed by the contractor.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor are required.

3. Affect on operation and maintenance cost of this project:

None

_____

Engineer

Item No. 2

Change Order No. 21

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The original design drawings did not provide an emergency source of lighting in the stairways located at either end of the new Aeration Tunnel.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor are required.

3. Affect on operation and maintenance cost of this project:

These additional battery operated lights will provide a safety feature for the operating personnel should they be required to exit the operation tunnels during a power failure.

_____

Engineer

Item No. 3

Change Order No. 21

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The motor control center MCC-P4 is being modified in such a manner that the starters, transformers, circuit breakers, and other electrical components conform with the actual electrical requirements of the equipment furnished and installed by the contractor and also with the electrical requirements of the existing equipment that is to remain in service.

2. Will proposed change alter size of the project? Yes X No _____

   If yes, explain

   Additional material and labor are required.

3. Affect on operation and maintenance cost of this project:

   None

_____

Engineer

Item No. 4

Change Order No. 21

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The space requirements for motor control center MCC-P1 exceeded the available floor space; therefore, MCC-P1 is to be split into three separate units and modified in such a manner that the remaining starters, transformers, circuit breakers and other electrical components conform with the actual electrical requirements of the new equipment furnished and installed by the contractor.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor are required.

3. Affect on operation and maintenance cost of this project:

None

_____

Engineer

Item No. 5

Change Order No. 21

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: Motor control center MCC-P1-1 was originally a part of MCC-P1 and was established as an independent MCC complete with starters, transformers, circuit breakers, control contactors and other electrical components that conform to the electrical requirements for the auxiliary systems associated with the four (4) new blowers.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor are required.

3. Affect on operation and maintenance cost of this project:

None

_____

Engineer

Change Order No. 21

Item No. 6

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The original plans did not provide for any DC operated emergency lights in the new blower room; therefore, four (4) type MB fixtures were changed to include a 150 watt quartz lamp in each fixture plus DC circuit wiring was added to provide an emergency power source to the quartz lamps.

2. Will proposed change alter size of the project? Yes X No _____

   If yes, explain

   Additional material and labor required.

3. Affect on operation and maintenance cost of this project:

   None

_____

Engineer

Change Order No. 21

Item No. 7

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The DC distribution system originally consisted of a separate charger, and a transfer switch, circuit breaker panel board and a feeder that were a part of MCC-P1. These components have now been grouped together into one enclosure to provide a centralized unit that will serve the present as well as the new systems that require direct current power.

2. Will proposed change alter size of the project? Yes X No _____

   If yes, explain

   Additional material and labor are required.

3. Affect on operation and maintenance cost of this project:

   None

_____

Engineer

Change Order No. 21

Item No. 8

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: This present gas compressor was found at the site to be located closer to MCC-C than MCC-P1, thus the branch feeders are being reduced in total overall length.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor are required.

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Change Order No. 21

Item No. 9

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: It has been determined that the existing gas booster pump must remain in operation, thus it is necessary that a branch circuit be provided from MCC-C to the pump motor.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor are required.

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Change Order No. 21

Item No. 10

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The motor control center MCC-P2 is being modified in such a manner that the starters, transformers, circuit breakers, and other electrical components conform with the actual electrical requirements of the equipment furnished and installed by the contractor and also with the electrical requirements of the existing equipment that is to remain in service.

2. Will proposed change alter size of the project? Yes X No _____

   If yes, explain

   Additional material and labor are required.

3. Affect on operation and maintenance cost of this project:

   None

_____

Engineer

Change Order No. 21

Item No. 11

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The deletion of the stop/start buttons at the starters associted with the shredder motor is a safety requirement that will prevent anyone from remotely starting the shredders while some workman is working at the shredder location.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Material and labor will be deleted.

3. Affect on operation and maintenance cost of this project:

The omission of the remote stop/start pushbuttons is a safety feature required to prevent injury to personnel working or performing repair work on the shredder located in the grit chamber.

_____

Engineer

Change Order No. 21

Item No. 12

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The branch feeders to the new sluice gate motorized operators are being reduced in size to conform with the actual current requirements.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Labor will be deleted.

3. Affect on operation and maintenance cost of this project:

N/A

Engineer

Change Order No. 21

Item No. 13

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The motor control center MCC-C is being modified in such a manner that the starters, transformers, circuit breakers, and other electrical components conform with the actual electrical requirements of the equipment furnished and installed by the contractor and also with the electrical requirements of the existing equipment that is to remain in service.

2. Will proposed change alter size of the project? Yes X No _____

   If yes, explain

   Material and labor will be deleted.

3. Affect on operation and maintenance cost of this project:

   None

_____

Engineer

Change Order No. 21

Item No. 14

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: It has been determined that the existing 10 HP air compressor/condenser unit must remain in operation, thus it is necessary that a branch circuit be provided from MCC-1 to the compressor motor.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor will be required.

3. Affect on operation and maintenance cost of this project:

None

_____

Engineer

Change Order No. 21

Item No. 15

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The electrical load requirements and equipment shown on Drawing E-17, Sheet 131 of the Chemical Unloading Station exceeded the requirements for the equipment actually furnished and installed, thus it was necessary to reduce the size and number of electrical conductors from MCC-3 to the Station Building.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor will be required.

3. Affect on operation and maintenance cost of this project:

None

_____

Engineer

Change Order No. 21

Item No. 16

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The motor control center MCC-P3-A is being modified in such a manner that the starters, transformers, circuit breakers, and other electrical components conform with the actual electrical requirements of the equipment furnished and installed by the contractor and also with the electrical requirements of the existing equipment that is to remain in service.

2. Will proposed change alter size of the project? Yes X No _____

   If yes, explain

   Additional material and labor will be required.

3. Affect on operation and maintenance cost of this project:

   None

_____

Engineer

Change Order No. 21

Item No. 17

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The motor control center MCC-B is being modified in such a manner that the starters, transformers, circuit breakers, and other electrical components conform with the actual electrical requirements of the new equipment furnished and installed by the contractor.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor will be required.

3. Affect on operation and maintenance cost of this project:

None

Engineer

Change Order No. 21

Item No. 18

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The chemical feed pumps are existing pieces of equipment that are being reinstalled and, as such, require 120 volt, single phase circuits, thus the specified 480 volt, 3 phase circuits are not required.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor will be required.

3. Affect on operation and maintenance cost of this project:

None

_____

Engineer

Change Order No. 21

Item No. 19

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The present motor control center cubicles cannot be changed to receive the new style starters being furnished by the contractor, thus it is necessary to remove the two (2) existing section cubicles and install a new motor control center cubicle complete with the necessary electrical components required to serve the new items of equipment being furnished and installed by the contractor.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor will be required.

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Change Order No. 21

Item No. 20

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The new compressor as furnished and installed by the Contractor required a larger size circuit breaker than originally specified; therefore, a new 50 ampere, 3 pole breaker was furnished and installed for motor branch circuit protection to the motor driving the new compressor unit.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional labor will be required.

3. Affect on operation and maintenance cost of this project:

None

Engineer

City Clerk Memorandum

CHARLES W. WESTERMAN, Clerk

To Mayor Robert E. Armstrong Date 8-16-78

From Charles W. Westerman - City Clerk

Subject Appearance before Common Council - 8-22-78

COPIES TO:

BILL NO. S-78-08-28

AN ORDINANCE approving Change Order No. 21, in connection with the Water Quality Control Project - Division I of Water Pollution Control Plant Addition

Pursuant to the request of the Standing Committee Chairman of City Utilities of the Common Council, the presence of someone familiar with the above ordinance is respectfully requested on August 22, 1978, 7:00 P.M., Room 128, Common Council Conference Room.

Common Council would like more information regarding the Water Quality Control Project - Division I of the Water Pollution Control Plant Addition.

Your cooperation will be greatly appreciated.

Connie Bullard

4149

TITLE OF ORDINANCE SPECIAL ORDINANCE - CHANGE ORDER NO. 21 - WATER QUALITY CONTROL PROJECT - DIVISION I OF WATER POLLUTION CONTROL PLANT ADDITION

DEPARTMENT REQUESTING ORDINANCE BOARD OF PUBLIC WORKS

S-78-08-28

SYNOPSIS OF ORDINANCE CHANGE ORDER NO. 21 - WATER QUALITY CONTROL PROJECT - DIVISION I OF WATER POLLUTION CONTROL PLANT ADDITION, HAGERMAN-SHAMBAUGH, JOINT BIDDERS, FOR: MODIFICATION OF MOTOR CONTROL CENTER TO CONFORM WITH ELECTRICAL REQUIREMENTS, PROVIDE EMERGENCY LIGHTING SOURCE IN STAIRWAYS IN AERATION TUNNEL, ADD'L EMERGENCY POWER SOURCE, RELOCATION OF GAS COMPRESSOR, DELETION OF REMOTE STOP/START PUSHBUTTONS ON SHREDDER TO PREVENT INJURY, ALTER SLUICE GATE TO CONFORM WITH REQUIREMENTS, CHANGE ELECTRICAL CONDUCTORS TO COPE WITH ELECTRICAL LOAD REQUIREMENT INSTALL NEW MOTOR CONTROL CENTER CUBICLE TO RECEIVE NEW STYLE STARTERS FOR NECESSARY ELECTRICAL COMPONENTS AND INSTALLATION OF NEW LARGER SIZE CIRCUIT BREAKER FOR NEW COMPRESSOR BEING FURNISHED.

(MEMORANDUM AND CHANGE ORDER ATTACHED)

TOTAL REVISED CONTRACT AMOUNT INCLUDING THIS CHANGE $21,957,782.89

EFFECT OF PASSAGE ADD'L SAFETY FEATURES FOR PERSONNEL: (1) IN OPERATION TUNNELS DURING POWER FAILU (2) DELETION OF REMOTE PUSHBUTTONS TO PROTECT THOSE OPERATING SHREDDER IN GRIT CHAMBER (3) EMERGENCY LIGHTING IN NEW AERATION TUNNEL, PLUS ADDITON OF OTHER ELECTRICAL COMPONENTS TO CONFORM WITH ACTUAL ELECTRICAL REQUIREMENTS & AUXILIARY SYSTEMS

EFFECT OF NON-PASSAGE HAZARD WOULD EXIST WITH INADEQUATE EMERGENCY POWER SOURCE AND PROTECTIVE MEASURES FOR PERSONNEL.

MONEY INVOLVED (DIRECT COSTS, EXPENDITURES, SAVINGS) $83,471.27 FROM FEDERAL FUNDS

ASSIGNED TO COMMITTEE

EP